

BOARD OF FIREFIGHTING PERSONNEL STANDARDS AND EDUCATION

Hazardous Material Awareness/Operation

Sample Test



7/10/15

Version 0

Hazmat Awareness and Operations

1. NFPA 472, Standards for Professional Competence of Responders to Hazardous Material Incidents, 2008 Edition, Chapters 3, 4, 5 and 6.
2. Jones and Bartlett Hazardous Material Awareness and Operations
3. ERG, Emergency Response Guidebook, 2012 Edition

1. What does the C in CBRN stand for?
 - A. chemical
 - B. communication
 - C. corrosive
 - D. contact
2. When should the pre-entrance medical monitoring be completed?
 - A. within the last year
 - B. just prior to donning PPE
 - C. when first reporting for duty
 - D. immediately upon arrival
3. The majority of chemical-protective clothing is:
 - A. designed to be disposed of after a single use
 - B. fully encapsulating
 - C. designed for use on one specific material
 - D. reusable
4. What term refers to the process where unstable atoms of an element decay to a different state and emit excess energy in the form of particles or waves?
 - A. electromagnetism
 - B. radioactivity
 - C. covalence
 - D. molecular decomposition
5. A responder has come in contact with a hazardous material by handling a tool that was used to stop a leak. This is an example of:
 - A. secondary contamination
 - B. contamination
 - C. exposure
 - D. infection
6. Which protective action uses water or another liquid to reduce the concentration of a hazardous material?
 - A. dispersion
 - B. adsorption
 - C. dilution
 - D. suppression
7. Which is a defensive action?
 - A. plugging
 - B. patching
 - C. diking
 - D. product transfer

8. What is a typical symptom of heat stroke?
 - A. changes in mental status
 - B. profuse sweating
 - C. cold, clammy skin
 - D. weak pulse
9. How is the lid on an open-head drum fastened?
 - A. hooks welded to the sides grip it
 - B. crimping the lid flange over the drum lip
 - C. by being twisted onto a thread encircling the body
 - D. by a ring and tightening hardware
10. What is the process by which a hazardous chemical flows through closures, seams, or pinholes in a material?
 - A. leakage
 - B. seepage
 - C. penetration
 - D. intrusion
11. Which is a commonly used resource to determine the size of a vapor cloud?
 - A. a scientific functions-capable calculator
 - B. specialized computer software
 - C. preincident plan
 - D. GPS triangulation
12. How does a spill boom control a hazardous material?
 - A. it forms a barrier to the movement of the material
 - B. it absorbs the material
 - C. it reduces agitation of liquid within the boom perimeter
 - D. it covers the material
13. The level of protection that structural firefighting protective clothing provides first responders at a hazardous materials incident is best described as:
 - A. excellent
 - B. good
 - C. limited
 - D. nonexistent
14. Chemicals pass into and through a material on a molecular level by which process?
 - A. absorption
 - B. permeation
 - C. diffusion
 - D. infiltration
15. The safety officer position is part of which ICS organizational element?
 - A. the medical unit
 - B. the operations section
 - C. the safety branch
 - D. the command staff

16. What is the term for shipping papers carried on marine vessels?
- A. waybills
 - B. manifest
 - C. consist
 - D. bill of lading
17. Which action is an awareness level hazardous material responder qualified to take?
- A. implement protective actions
 - B. assist with decontamination of victims
 - C. conduct searches in a warm zone
 - D. perform reconnaissance from a warm zone
18. What does the blue diamond on the NFPA 704 symbol indicate?
- A. flammability
 - B. reactivity
 - C. special symbols
 - D. health
19. What is the most effective way to maintain the security of an isolation perimeter?
- A. posting security personnel
 - B. placing traffic cones, signage, and barrier tape
 - C. erecting barricades
 - D. using emergency vehicles to block access points
20. Which agency establishes requirements for fire department hazardous materials response?
- A. OSHA
 - B. EPA
 - C. USFA
 - D. FSTC
21. Which section of the Emergency Response Guidebook would a firefighter use when he or she knows the chemical name of the hazardous material?
- A. green
 - B. yellow
 - C. blue
 - D. orange
22. What is the first defense against danger for fire fighters when responding to a hazardous material incident?
- A. proper selection of PPE
 - B. maintaining crew integrity
 - C. recognition and awareness of the situation
 - D. preparatory lessons learned in the classroom

23. What is the process by which hazardous material enters the body by permeating the skin?
- A. absorption
 - B. ingestion
 - C. injection
 - D. inhalation
24. What is the DOT hazard class for flammable liquids?
- A. Class 1
 - B. Class 2
 - C. Class 3
 - D. Class 4
25. How large must the capacity of a liquid storage container be to qualify as a bulk storage container?
- A. more than 119 gallons
 - B. more than 499 gallons
 - C. 1000 gallons or more
 - D. 2500 gallons or more
26. The DOT defines a hazardous material as one that poses an unreasonable risk when:
- A. it is being transported
 - B. it is not properly contained or stored
 - C. it is used in a reasonable, controlled manner
 - D. it is exposed to common environmental conditions
27. As it applies to hazardous materials response, what does the term "isolation" mean?
- A. taking steps to control the direction of a material and subsequent exposure contact
 - B. use of appropriate personal protective equipment to prevent direct contact with the material
 - C. preventing spread of a material beyond a specified zone or perimeter
 - D. establishing a perimeter around the incident and controlling access
28. What is an etiological agent?
- A. a biohazard agent causing illness or death
 - B. a substance that gives off radiation
 - C. a dangerous material registered with the EPA
 - D. a substance that can cause harm to humans
29. What is the term for shipping papers carried on road and highway transportation vehicles?
- A. waybills
 - B. manifests
 - C. dangerous cargo manifests
 - D. bills of lading

30. What is the process by which hazardous materials enter the body by permeating the skin?
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